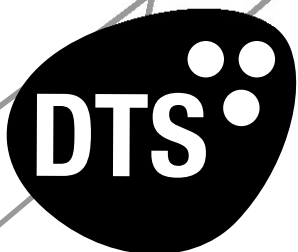


XR 5 WASH



The Lighting Company

User Manual Rel 1.0

GB

Le informazioni contenute in questo documento sono state attentamente redatte e controllate. Tuttavia non è assunta alcuna responsabilità per eventuali inesattezze. Tutti i diritti sono riservati e questo documento non può essere copiato, fotocopiato, riprodotto per intero o in parte senza previo consenso scritto della D.T.S.

DTS si riserva il diritto di apportare senza preavviso cambiamenti e modifiche estetiche , funzionali o di design a ciascun proprio prodotto. D.T.S. non assume alcuna responsabilità sull'uso o sull'applicazione dei prodotti o dei circuiti descritti.

The information contained in this publication has been carefully prepared and checked. However, no responsibility will be taken for any errors. All rights are reserved and this document cannot be copied, photocopied or reproduced, in part or completely, without prior written consent from D.T.S. D.T.S. reserves the right to make any aesthetic, functional or design modifications to any of its products without prior notice. D.T.S. assumes no responsibility for the use or application of the products or circuits described herein.

Les informations contenues dans le présent manuel ont été rédigées et contrôlées avec le plus grand soin. Nous déclinons toutefois toute responsabilité en cas d'éventuelles inexactitudes. Tous droits réservés. Ce document ne peut être copié, photocopié ou reproduit, dans sa totalité ou partiellement, sans le consentement préalable de D.T.S.

D.T.S. se réserve le droit d'apporter toutes modifications et améliorations esthétiques, fonctionnelles ou de design, sans préavis, à chacun de ses produits. D.T.S. décline toute responsabilité sur l'utilisation ou sur l'application des produits ou des circuits décrits.

Las informaciones contenidas en este documento han sido cuidadosamente redactadas y controladas. Con todo, no se asume ninguna responsabilidad por eventuales inexactitudes. Todos los derechos han sido reservados y este documento no puede ser copiado, fotocopiado o reproducido, total o parcialmente, sin previa autorización escrita de D.T.S.

D.T.S. se reserva el derecho a aportar sin previo aviso cambios y modificaciones de carácter estético, funcional o de diseño a cada producto suyo. D.T.S. no se asume responsabilidad de ningún tipo sobre la utilización o sobre la aplicación de los productos o de los circuitos descritos.

INDEX:

1- TECHNICAL FEATURES	4
2- IMPORTANT SAFETY INFORMATION	5
2.1 Fire prevention	
2.2 Prevention of electric shock	
2.3 Protection against ultraviolet radiation	
2.4 Safety	
2.5 Level of protection against the penetration of solid and liquid matter	
3- MOUNTING THE LAMP	6
3.1 Lamp alignment	
4- VOLTAGE AND FREQUENCY	7
5- INSTALLATION	7
5.1 Safety cable	
5.2 Protection against liquids	
5.3 Movement	
5.4 Risk of fire	
5.5 Forced ventilation	
5.6 Ambient temperature	
6- MAINS CONNECTION	8
6.1 Protection	
7- DMX SIGNAL CONNECTION	9
7.1 DMX Addresses	
7.2 Selecting the DMX address	
8- DISPLAY FUNCTIONS	11
9- PAN & TILT SPEED	14
10- FANS SPEED	
11- ERROR MESSAGES	
12- HIDDEN MENU	15
13- OPENING THE PROJECTOR HOUSING	16
14- PERIODIC CLEANING	
14.1 Lenses and reflectors	
14.2 Fans and air passages	
15- PERIODIC CONTROLS	
16- DMX PROTOCOLS	17
17-COLOUR WHEEL	22

1- TECHNICAL FEATURES

The XR 5 Wash is fitted with a Philips MSD 250/2 discharge lamp (GY9,5 lampholder base), with a colour temperature of 8500 °K and a luminous flux of 18,000 Lumens.

Average lifespan is 2000 hours, with replacement recommended before 2200 hours

Other recommended lamps: Osram HSD 250/2, GE CSD 250/2.

The unit incorporates:

Motorized zoom (13°-23°), rotating and indexable beam shaper (0°-170°), frost filter, 2 colour conversion filters (3.200°K and 5.600°K), CMY colour generation + a colour wheel (6 dichroic filters + open, with linear selection, and electronic or electromagnetic ballast.

Optical group

Fresnel lens Ø 150 mm (Borosilicate dichroic parabolic reflector)

Zoom

Motorized zoom (13°-23°)

Dimmer / shutter / strobo

Linear dimmer - Shutter - Strobe from 0,85 flash/sec to 10 flash/sec

Colours

CMY color generation system with 3 palettes for gradual and linear insertion + colour wheel (6 colours + open). Color change with blackout sync

Effects

Rotating and indexable beam shaper (0°-170°)

Colour conversion filters

3.200°K and 5.600°K

Pan / Tilt

Pan 540° (3,9 sec.) Tilt 270° (2,6 sec.) 16-bit resolution

16 DMX channels

Connections

4 XLR connectors (In and Out) with 3 and 5 pins.

Power supply

Electromagnetic ballast: 230 V (50/60 Hz) standard. On request 110 V 50/60 Hz.

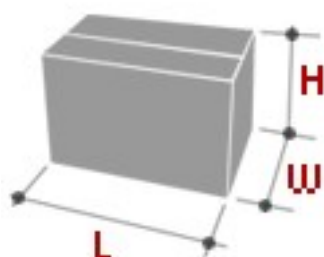
Power consumption 350 W

Remote Lamp on/off via DMX

Operating ambient temperature -10° / 40°

Weight

20 Kg



Packing Dimensions
(HxWxL)
550 x 440 x 880 mm

Weight
27 Kg



2- IMPORTANT SAFETY INFORMATION

2.1 Fire prevention:

XR5 can fit a Philips MSD250/2 or a Osram HSD250/2 or a GE CSD250/2.

The use of any other alternative lamp is not recommended and will null and void the fixture's warranty.

- Never locate the fixture on any flammable surface.
- Minimum distance from flammable materials: 1 MT.
- Minimum distance from the closest illuminable surface: 2 MT.
- Replace any blown or damaged fuses only with fuses of identical value. Refer to the wiring diagram if there is any doubt.
- Connect the projector to mains power via a thermal magnetic circuit breaker.

2.2 Prevention of electric shock:

- High voltage is present inside the unit. Unplug the unit prior to performing any function which involves touching the inside of the moving head, including lamp replacement.
- The level of technology present in the XR5 requires the assistance of specialised personnel for all servicing. Please refer to an authorised D.T.S. service centre.
- A good earth connection is essential for proper functioning of the projector.
- Never connect the unit without proper earth connection.
- The fixture should be located in places with a good air ventilation.

2.3 Protection against ultraviolet radiation:

- Never turn on the lamp if any of the lenses, filters or ABS covering is damaged. Their respective shielding functions will only operate efficiently if they are in perfect working order.
- Never look directly the lamp when it is on.

2.4 Safety:

- The projector should always be installed with bolts, clamps and other tools that are capable of supporting the weight of the unit.
- Always use a second safety cable to sustain the weight of the unit in case of the failure of the main fixing point.
- The external surface of the unit, at various points, may exceed 70°C. Never handle the unit until at least 10 minutes have elapsed since the lamp was turned off.
- Always replace the lamp if any physical damage is evident.
- Never install the fixture in an enclosed area lacking sufficient air flow. The ambient temperature should not exceed 40°C.
- A hot lamp may explode, so always wait for at least 10 minutes prior to attempting to replace the lamp.
- Always wear suitable hand protection when handling the lamp.

2.5 Level of protection against the penetration of solid and liquid matter:

- The projector is classified as an ordinary appliance and its protection level against the penetration of solid and liquid matter is IP 20.

3- MOUNTING THE LAMPS

Warning: Switch off the unit before replacing the lamp.

Philips MSD250/2
Power 250W
Luminous flux 18.000 lm
Colour temperature 8.500°K
Lampbase GY9,5
Rated life 3,000 hours

1) Using a screwdriver, remove the 3 screws X,Y, Z, (photo 1) which fix the lamp holder.



Photo 1

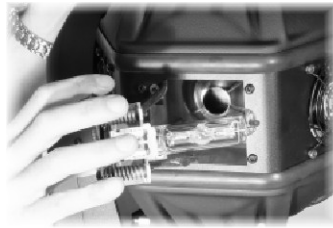


Photo 2



Photo 3

2) Remove the lamp holder assembly and insert the lamp (photo 2).

The lamp used on XR 5 is made in quartz glass and should be handled with care. Always follow the instructions supplied in the lamp's packaging. Never touch the glass directly but use the tissue provided in the lamp's packaging. The GY9,5 lamp socket is not symmetrical.

DO NOT USE UNDUE FORCE ON THE GLASS. In case of difficulty, read again the instructions and repeat the procedure.

3) Replace the lamp assembly and tighten the screws X,Y,Z, which were previously removed (photo3).

3.1 Lamp alignment

Attention: we recommend to align the lamp in the optical system to avoid overheating of the dichroic filters and other components inside the unit.



Photo 5

Alignment is carried out using the 3 adjusters A, B and C.

During this operation you must have a uniform luminosity all around the projected area.

4- VOLTAGE AND FREQUENCY

The XR5 with electromagnetic ballast can operate at 230 VOLT 50-60 Hz (100 VOLT 50/60 Hz and 120V 50/60 Hz on request)

5- INSTALLATION

XR5 may be either floor or ceiling mounted.

For floor mounting installations, the XR5 is supplied with four rubber mounting feet on the base. For ceiling mounted installations, we recommend the use of appropriate clamps to fix the unit to the mounting surface.

The supporting structure from which the unit is hung should be capable of bearing the weight of the unit, as should any clamps used to hang it. The structure should also be sufficiently rigid so as not to move or shake whilst the XR5 is moving.

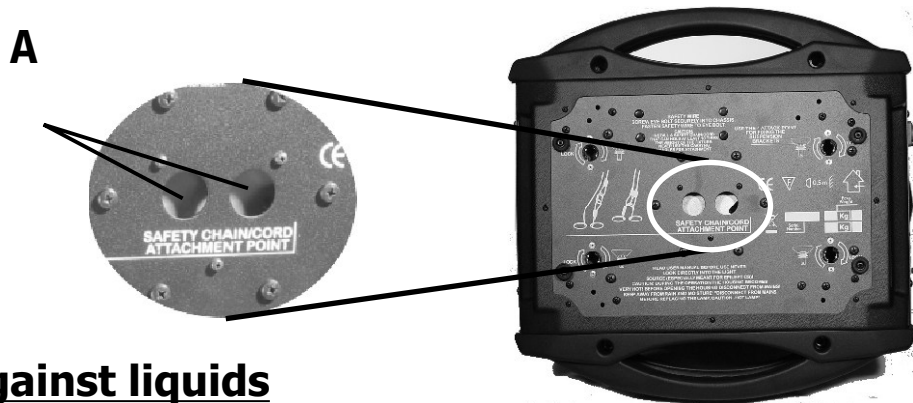
Four quarter-turn fast locks placed on the base of the units allow - by using the two fast lock C clamps provided in the box - to fix the unit in any position.



5.1- Safety cable

We recommend the use of a safety cable or chain connected to the Xr5 and to the suspension truss in order to avoid the fixture accidentally falling should the main fixing point fail. Make sure that the iron cable or chain can bear the weight of the entire unit.

You may attach the safety chain to the two holes (A) located on the base of the fixture, as shown in the picture below.

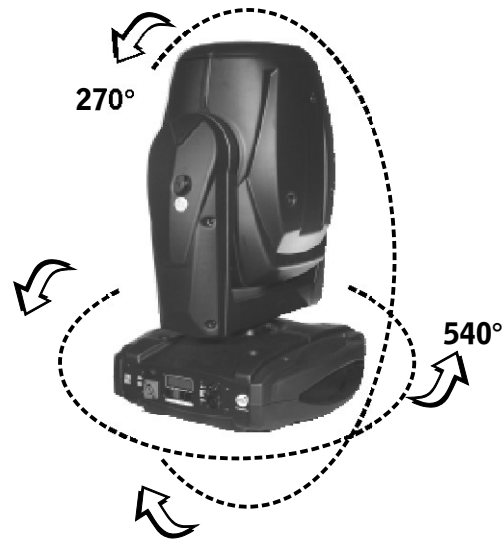


5.2- Protection against liquids

The projector contains electric and electronic components which should under no circumstances come into contact with oil, water or any other liquid. The proper unit functioning would be compromised should this occur.

5.3- Movement

The projector has a maximum movement of 540° for Pan and 270° for Tilt. DO NOT place any obstructions in the path of the projector's movement.



5.4- Risk of fire

Each fixture produces heat and must be installed in a well-ventilated place. The minimum recommended distance from flammable material is 1 MT.

Minimum distance from the object being illuminated is 2 MT.

5.5- Forced ventilation

You will note, on inspection, that the unit features various air inlets and cooling fans located on both the base and head of the fixture. These should, under no circumstances, be blocked or obstructed whilst the projector is in operation.

Doing so could cause the fixture to seriously overheat thereby compromising its proper operation.

5.6- Ambient temperature

The projector should never be installed in places that lack a constant air flow. The ambient temperature should NOT exceed 40°C.

6- MAINS CONNECTION

XR5 with electromagnetic ballast operate at 230 VOLT 50-60 Hz. Prior to connecting the unit to your mains supply, ensure that the model in your possession correctly matches the mains supply available. For connection purposes, ensure that your plug is capable of supporting 3,15 amps at 230V, Strict adherence to regulatory norms is strongly recommended.



**Electromagnetic ballast
230V 50 / 60Hz**

6.1- Protection

The use of a thermal magnetic circuit breaker is recommended for each XR 5. A good earth connection is essential for the correct operation of the projector.

7- DMX SIGNAL CONNECTION

The unit operates using the digital DMX 512 (1990) signal. Connection between the mixer and the projector or between projectors must be carried out using a two pair screened ø 0.5 mm cable and a CANNON XLR 5 or 3 pins connector.

Ensure that the conductors do not touch each other. Do not connect the cable ground to the XLR chassy. The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first projector to the DMX IN plug of the second one.

In this way, all the projectors are cascade connected.

NB. If the display showing the DMX address flashes, then one of the following errors has occurred:

- DMX signal not present
- DMX address not valid
- DMX reception problem

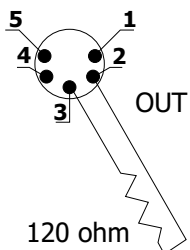


For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

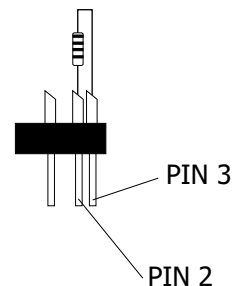
The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor

Between pin 2 and 3.

The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XLR CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



7.1-DMX Addresses

XR 5 Wash have 16 DMX channels.

Set the following addresses on the mixer:

Projector 1 A001

Projector 2 A017 If you want to select the next projector, just add "16"

Projector 3 A033

..... A....

projector 6 A081

7.2-Selecting the DMX address

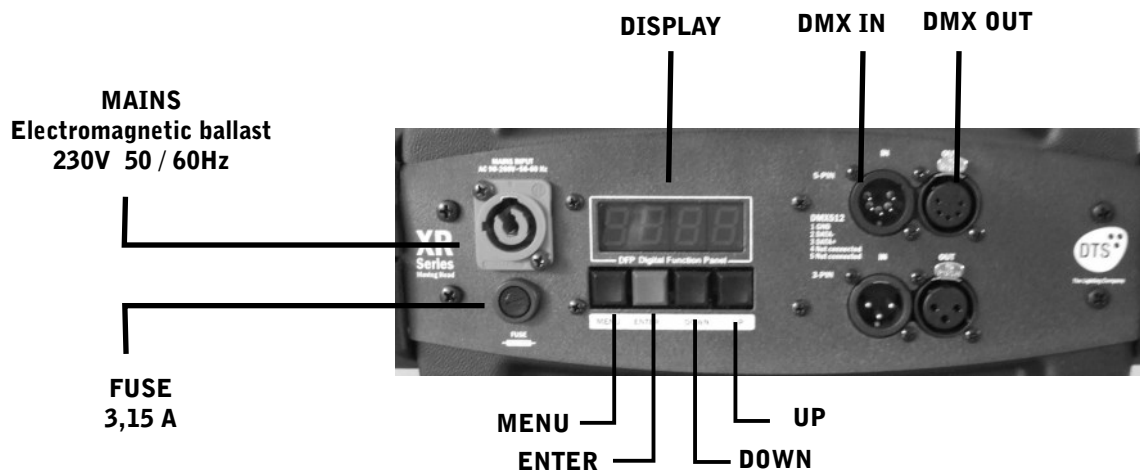
1) Press the UP-DOWN key until you reach the required DMX channel. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).

2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now set to the new DMX address.

TRICKS:

if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.

8- DISPLAY FUNCTIONS



DISPLAY FUNCTIONS

The XR5 display panel shows all the available functions. Using these functions, it is possible to change some of the parameters and add some functions. Changing the DTS setting can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.

NOTE: the symbol  shows which key has to be pushed to obtain the desired function.

 MENU  UP-DOWN	 ENTER  UP-DOWN	 ENTER
PAN MOVEMENT INVERSION To reverse Pan movement from left to right and vice versa	 UP-DOWN	 ENTER
 MENU  UP-DOWN	 ENTER  UP-DOWN	 ENTER
TILT MOVEMENT INVERSION To reverse Tilt movement from bottom upwards and vice versa	 UP-DOWN	 ENTER
 MENU  UP-DOWN	 ENTER  UP-DOWN	 ENTER  UP-DOWN
REVERSE DISPLAY Reverses display's reading depending on the mounting position (On the ground or suspended).	 UP-DOWN	 ENTER
DISPLAY STAND BY To turn off the display (after 5 seconds) Or leave it always on.	 UP-DOWN	 ENTER
 MENU  UP-DOWN	 ENTER  UP-DOWN	 ENTER
DMX MODE To select DMX mode : Mode 1 or Mode 2	 UP-DOWN	 ENTER

8- DISPLAY FUNCTIONS



TEST

TEST MODE

Full test and single function test.



ALL

ALL

PAN

PAN

TILT

TILT

DIMMER

DIMM

SHUTTER

SHUT

COLOR

COLOR

CYAN

CYAN

MAGENTA

MAGN

YELLOW

YELL

EFFECTS

EFF

ZOOM

ZOOM



RESET

RESET

All motors reset



En

RESET ENABLED VIA DMX



ds

RESET DISABLED VIA DMX



RESET

TOTAL RESET



DFSE

DEFAULT

To restore default setting



SURE



SOFT

SOFTWARE

Software version



63.63

Pcb 8 motors. Pcb PAN&TILT



FANS

Fan control

To control the fan speed .



1



12



(DEFAULT : 12)



SPEED

SPEED control

Pan Tilt Speed control.



1



6



(DEFAULT : 4)

8- DISPLAY FUNCTIONS



LAMP



dnh



ON / OFF VIA DMX (default)

LAMP

Lamp always ON-always OFF
Or lamp ON-OFF selectable via DMX

on



FORCED ON

off



FORCED OFF

ADJUST

To adjust the lamp with no mixer connected.
It's possible to set the parameters for
PAN-TILT and FOCUS

Adj



PAN



128

tilt

128

FOCU

128

ACC

Lamp strikes counter

ACC



10



rSud



Code



100



RESERVED

Pan lock-Tilt lock
Pan free-Tilt free

PAN LOCK

LOCK THE PAN TO THE DESIRED VALUE

Pn.LH



no



YES



128

TILT LOCK

LOCK THE TILT TO THE DESIRED VALUE

tL.LH



no



YES



128

PAN FREE

REMOVE POWER TO PAN MOTOR

Pn.Fr



no



YES



TILT FREE

REMOVE POWER TO TILT MOTOR

tL.Fr



no



YES



ESC



t me



LAMP



4

TIMER

lamp life TIME (reset possible)
and total UNIT LIFE TIME (reset not possible)



Unit



8



resL



SURE



9- PAN & TILT SPEED (SPEE) (default: 4)

You can set the PAN and TILT motors at high speed on your Xr5.

Press menu until you see SPEE.

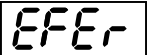
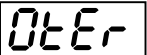
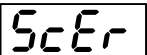
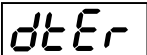
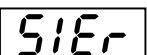
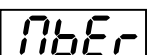
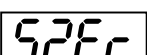
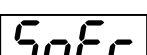
Press ENTER and select a speed with UP-DOWN (there are 4 speeds). Confirm by pressing ENTER.

When you use speed 4 (the highest) PAN and TILT speed is very high and your projector may lose its path. In this case, the encoder corrects the position.

10- FAN SPEED (FANS)(default: 12)

Fan speed regulation makes it possible to reduce fan noise. However, the ambient temperature must be less than 35° C.

11- ERROR MESSAGES:

	————	ERROR POSITIONING OF COLOUR WHEEL		————	ERROR ENCODER PAN
	————	ERROR POSITIONING OF BEAM SHAPE EFFECTS		————	ERROR ENCODER TILT
	————	ERROR POSITIONING OF ZOOM		————	ERROR DMX ADDRESS
	————	ERROR ALIGNMENT SENSORS OF ZOOM LENS		————	ERROR LOADING EPROM DATA
	————	ERROR INPUT IN AUTO MODE		————	ERROR COLOUR SENSOR CIRCUIT/ZOOM 1
	————	ERROR INTERNAL COMMUNICATION		————	ERROR COLOUR SENSOR CIRCUIT/ZOOM 2
	————	ERROR SYNCHRONIZED FREQUENCY MEASURE (SYNCHRONISM FOR LAMP ON)			

12- HIDDEN MENU

For technical personnel only.

To operate this menu:

-Connect the projector to the DMX controller (DMX SIGNAL MUST BE CORRECTLY RECEIVED)

- Reset the Xr5 (reset from the MENU, not from the DMX controller!).
- While reset is running, press the MENU and ENTER keys at the same time.

CAL

Electronic calibration of the motors.

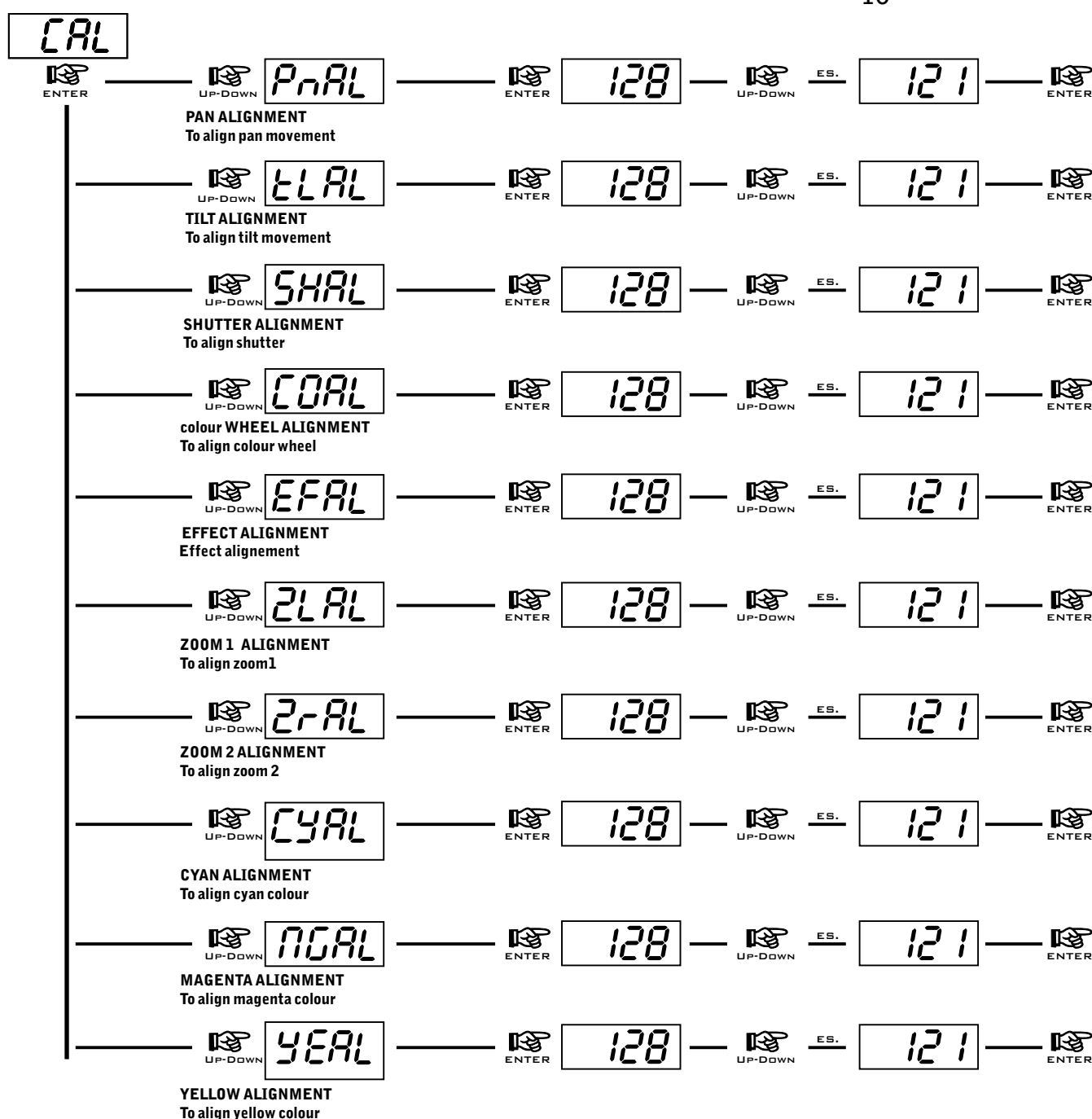
RESN

Reset EEPROM (Reset all settings. ATTENTION: by pressing this key you must repeat all previous calibrations)

ESC

Exit from hidden menu.

16



13- OPENING THE PROJECTOR HOUSING

It is possible to inspect the inside of the projector by removing the cover as indicated below.

ATTENTION

REMOVE MAINS POWER PRIOR TO ACCESSING THE PROJECTOR'S INTERNAL COMPONENTS.

- 1) Loosen the 3 (1/4 turn) screws which fix the head covers (photo 1) .
- 2) Once unscrewed, simply lift the covers to access the internal components (photo 2).



Photo 1



Photo 2

14- PERIODIC CLEANING

14.1- Lenses and reflectors

Even a fine layer of dust can substantially reduce the luminous output . Regularly clean all lenses and the reflector using a soft cotton cloth, dampened with a specialist lens cleaning solution.

14.2- Fans and air passages

The fans and air passages must be cleaned approximately every 6 weeks. This periodic cleaning will depend of course, on the conditions in which the projector is operating. Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or an air compressor. If necessary, clean the fans and air passages more frequently.

15- PERIODIC CONTROLS

Lamp

The lamp should be replaced if there is any visible damage or deformation due to heat. This will help to avoid the danger of the lamp exploding.

Mechanical parts

Periodically check all mechanical parts, gears, guides, belts, etc. for wear and tear, replacing them if necessary. Periodically check the lubrication of all components, particularly the parts subject to high temperatures. If necessary, lubricate with suitable lubricant, available from your D.T.S. distributor. Check the tension of the belts and adjust it if necessary.

Electrical components

Check all electrical components for correct earthing and proper connection of all connectors; refasten them if necessary.

Fuse replacement

Locate the fuse, which protects the lamp and electronics, in the base of the XR5.

Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type if necessary.

16- DMX PROTOCOL

16 CHANNEL MODE (16bit)

- 1 PAN msb (540°)
- 2 PAN lsb
- 3 TILT msb(320°)
- 4 TILT lsb
- 5 MOVEMENT SPEED
- 6 DIMMER
- 7 SHUTTER
- 8 COLOUR
- 9 CYAN
- 10 MAGENTA
- 11 YELLOW
- 12 SPEED CMY / DIMMER
- 13 MACRO CMY / COLOUR
- 14 EFFECTS
- 15 ZOOM
- 16 RESET

DMX CHANNEL	1	Parameter: PAN msb 540°
-------------	----------	--------------------------------

DMX CHANNEL	2	Parameter: PAN lsb
-------------	----------	---------------------------

DMX CHANNEL	3	Parameter: TILT msb 319°
-------------	----------	---------------------------------

DMX CHANNEL	4	Parameter: TILT lsb
-------------	----------	----------------------------

DMX CHANNEL	5	Parameter: MOVEMENT SPEED
-------------	----------	----------------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-10					Standard
11-25					Fast movement
26-127					Vector mode from fast to slow
128-247					Variable time reaction to DMX signal (fast to slow)
248-255					Slow reaction time to DMX signal

DMX CHANNEL	6	Parameter: DIMMER
-------------	----------	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-8					Black-out
9-255					Proportional dimmer

DMX CHANNEL	7	Parameter: SHUTTER
-------------	---	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9					Black-out
10-23					Strobe random speed
24-37					Strobe speed 1 min.
38-51					Strobe speed 2
52-65					Strobe speed 3
66-79					Strobe speed 4
80-93					Strobe speed 5
94-107					Strobe speed 6 max.
108-121					Flash open speed 1 min.
122-135					Flash open speed 2
136-149					Flash open speed 3
150-163					Flash open speed 4 max.
164-177					Flash closed speed 1 min.
178-191					Flash closed speed 2
192-205					Flash closed speed 3
206-219					Flash closed speed 4 max.
220-227					Colours / Macros in black-out
228-233					Pan / Tilt in black-out
234-255					Open

DMX CHANNEL	8	Parameter: COLOUR
-------------	---	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-12					White
13-25					Colour 1 (3200° K)
26-38					Colour 2 (5600°K)
39-51					Colour 3
52-64					BiColour 3/4
65-77					Colour 4
78-90					BiColour 4/5
91-103					Colour 5
104-116					BiColour 5/6
117-129					Colour 6
130-142					BiColour 6/7
143-155					Colour 7
156-168					Bicolour 7/8
169-181					Colour 8
182-197					Bicolour 8/white
198-200					Right rotation speed 1 max.
201-203					Right rotation speed 2
204-206					Right rotation speed 3
207-209					Right rotation speed 4

210-212					Right rotation speed 5
213-215					Right rotation speed 6
216-218					Right rotation speed 7
219-221					Right rotation speed 8
222-224					Right rotation speed 9 min
225-228					Stop
229-231					Left rotation speed 1 min.
232-234					Left rotation speed 2
235-237					Left rotation speed 3
238-240					Left rotation speed 4
241-243					Left rotation speed 5
244-246					Left rotation speed 6
247-249					Left rotation speed 7
250-252					Left rotation speed 8
253-255					Left rotation speed 9 max.

DMX CHANNEL	9	Parameter: CYAN
-------------	---	------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	10	Parameter: MAGENTA
-------------	----	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	11	Parameter: YELLOW
-------------	----	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	12	Parameter: SPEED CMY / DIMMER
-------------	----	--------------------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-7					No Function
8-255					Variable speed from max to min

DMX CHANNEL	13	Parameter: MACRO CMY / COLOUR
-------------	----	--------------------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9					No Function
10-14					Macro 1
15-19					Macro 2
20-24					Macro 3
25-29					Macro 4
30-34					Macro 5
35-39					Macro 6
40-44					Macro 7
45-49					Macro 8
50-54					Macro 9
55-59					Macro 10
60-64					Macro 11
65-69					Macro 12
70-74					Macro 13
75-79					Macro 14
80-84					Macro 15
85-89					Macro 16
90-94					Macro 17
95-99					Macro 18
100-104					Macro 19
105-109					Macro 20
110-114					Macro 21
115-121					Macros rainbow wait = 0
122-128					Macros rainbow wait = 2
129-135					Macros rainbow wait = 3
136-142					Macros rainbow wait = 4
143-149					Macros rainbow wait = 5
150-156					Macros rainbow wait = 6
157-163					Macros rainbow wait = 7
164-170					Macros rainbow wait = 8
171-177					Macros rainbow wait = 9
178-184					Macros rainbow wait = 10
185-191					Full colours rainbow wait = 0
192-198					Full colours rainbow wait = 2
199-205					Full colours rainbow wait = 3
206-212					Full colours rainbow wait = 4
213-219					Full colours rainbow wait = 5
220-226					Full colours rainbow wait = 6
227-233					Full colours rainbow wait = 7
234-240					Full colours rainbow wait = 8
241-247					Full colours rainbow wait = 9
247-255					Full colours rainbow wait = 10

DMX CHANNEL	14	Parameter: EFFECTS
-------------	-----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-19					No effect
20-39					Frost
40-255					Beam Shape

DMX CHANNEL	15	Parameter: ZOOM
-------------	-----------	------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-225					Proportional

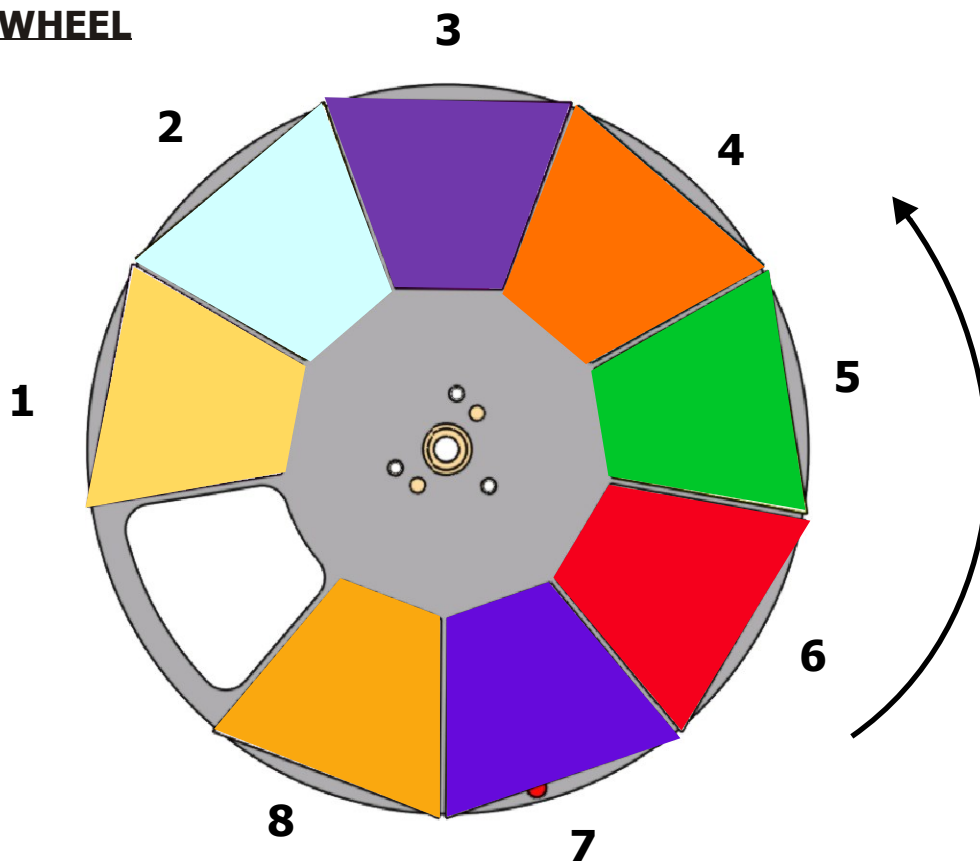
DMX CHANNEL	16	Parameter: LAMP / RESET
-------------	-----------	--------------------------------

MODE 1 (DEFAULT)

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9	5				No Effect
10-60	30				Lamp OFF (Active after 3 seconds)
61-129	95				No Effect
130-179	154				Lamp ON (Active after 3 seconds)
180-200	190				No Effect
201-239	220				Internal Motors Reset
240-255	247				Total Reset

MODE 2 (SAME AS XR 250 WASH)

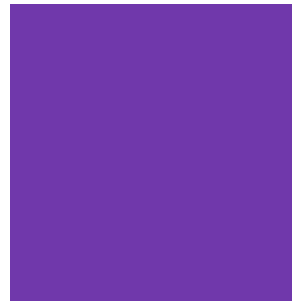
DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-29					No effect
30-85					Lamp OFF (active after 3 seconds)
86 - 170					Internal motor Reset
171-235					Total Reset
236-255					Lamp ON (active after 3 seconds)

17- COLOUR WHEEL**COL1**

0507K004
CONV.FILTER CTO
TC3256

COL2

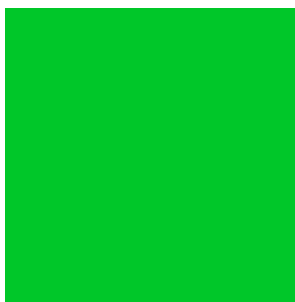
0507K003
CONV. FILTER CTB
DL542

COL3

0507C046.D01
WOOD SW 460

COL4

0507C051.D01
ORANGE LW590

COL5

0507C042.D01
GREEN WB5055

COL6

0507C047.D01
RED LW 640

COL7

0507C041.D01
DARK BLUE SW490

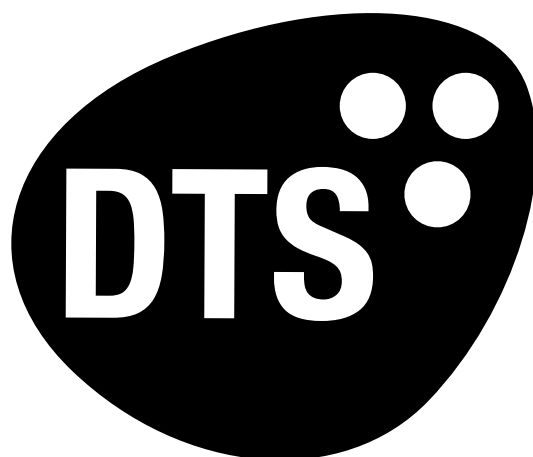
COL8

0507C053.D01
AMBER LW 550

NOTE

The information contained in this publication has been carefully prepared and checked. However, no responsibility will be taken for any errors. All rights are reserved and this document cannot be copied, photocopied or reproduced, in part or completely, without prior written consent from D.T.S. D.T.S. reserves the right to make any aesthetic, functional or design modifications to any of its products without prior notice. D.T.S. assumes no responsibility for the use or application of the products or circuits described herein.

MADE IN ITALY



The Lighting Company